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EXAMINER				
KEATON, SHERROD L				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/699,968

Applicant(s)

BOMERS, FLORIAN U.

Examiner

Sherrod Keaton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4-8-08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to the filing of 4-08-2008. Claims 1-4 and 6-24 are pending and have been considered below:

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The applicant has failed to disclose what the user configured mathematical scaling is comprised of. The applicants have disclosed a mathematical function but do not disclose if mathematical scaling is configured within this function.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The mathematical scaling is not explicitly disclosed in the

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specification, therefore it is unclear exactly what applicant deems as mathematical scaling.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 6-8, 11-14, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport et al ("Davenport" US 2004/0263477 A1) in view of Bear et al ("Bear" 20040257341 A1).

Claim 1: Davenport discloses a computer readable medium storing a computer program comprising:

program instructions to create event translators that translate incoming input events to said PC into translated input events according to user-defined translation behaviors(abstract; Page 4, Paragraph 59 and 64);

program instructions to associate each event translator with a type of incoming input event responsive to user input (abstract; Page 4, Paragraph 59 and 64); and

program instructions to configure a translation behavior for each event translator responsive to user input such that during execution of computer program by PC the event translator generates a desired translated input event responsive to receiving an incoming input event to said PC of the type of incoming input event associated with the event translator, including program instructions to define a translation function that modifies incoming input events to said PC according to one or more user configured functions. (abstract; Page 4, Paragraph 59 and 64; Page 5, Paragraph 67).

However Davenport does not explicitly disclose that the computer is configured for execution by a personal computer (PC). However Bear discloses a system wherein the invention of translating inputs is performed by the computer (Page 3, Paragraph 74 and Figure 15c; Page 10, Paragraph 130-131). Davenport has also disclosed that the peripheral action language (PAL) can be embodied outside of the input device (Figure 4b; Page 4, Paragraph 58). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide the functionality of the computer executing the instructions in Davenport as taught by Bear. One would have been motivated to allow the computer to perform the execution because it improves the efficiency of the system being that the PC provides more powerful processors.

Claim 2: Davenport and Bear disclose a computer readable medium storing a computer program as in claim 1 above, and further discloses wherein program

instructions to create event translators that translate incoming input events to said PC into translated input events according to user-defined translation behaviors comprise program instructions to create one or more operating system hooks(Bear provides the PC operating system) to detect event messages associated with incoming input events corresponding to one or more types of computer input devices (Davenport: Page 4, Paragraph 59). Here inputs are received and translated.

Claim 3: Davenport and Bear disclose a computer readable medium storing a computer program of claim 1 above, and further discloses wherein program instructions to create event translators that translate incoming input events to said PC into translated input events according to user-defined translation behaviors comprise program instructions to create one or more operating system hooks to receive event messages associated with incoming input events corresponding to one or more types of computer input devices (Davenport: Page 4, Paragraph 59). Here inputs are received and translated.

Claim 4: Davenport and Bear disclose a computer readable medium storing a computer program of claim 1, wherein program instructions to configure a translation behavior for each event translator responsive to user input comprises program instructions to define an incoming-to-translated input event mapping that sets the type of translated input event to be generated (Davenport: Page 4, Paragraph 59).

Claim 6: Davenport and Bear disclose a computer readable medium storing a computer program as in claim 1 above, and further discloses wherein program instructions to configure a translation behavior for each event translator responsive to user input comprises program instructions to determine whether the incoming input event is swallowed or passed-through (Davenport: Page 5, Paragraph 66). Here inputs are linked together if need be representing a swallow or pass instruction.

Claim 7: Davenport and Bear disclose a the computer readable medium storing a computer program as in claim 1 above, and further discloses wherein program instructions to configure a translation behavior for each event translator responsive to user input comprises program instructions to determine whether the incoming input event causes a one-shot translated input event or causes a repeating translated input event (Davenport: Page 5, Paragraph 65).

Claim 8: Davenport and Bear disclose a computer readable medium storing a computer program as in claim 1 above, and further discloses wherein program instructions to configure a translation behavior for each event translator responsive to user input comprises program instructions to determine whether the incoming input

event triggers an activation of or a focus shift to a targeted program (Davenport: Page 5, Paragraph 70-72).

Claim 11: Davenport discloses a method of adapting a personal computer (PC) such that its response to one or more types of input events is modified according to user-configured event translation behavior, the method comprising:

wherein each event translator maps incoming input events to said PC of a selected type into translated input events according to a defined translation behavior (Page 4, Paragraph 59 and 64); wherein the defined translation behavior includes modifying one or more event parameters of the incoming input events (Page 5, Paragraph 67)

configuring the defined translation behavior for each event translator based on user input to the PC (Page 4, Paragraph 59 and 64); and

detecting input events of the selected types incoming to the PC and translating those incoming input events into corresponding translated input events according to the defined translation behaviors of the one or more event translators (Page 4, Paragraph 59 and 64).

However Davenport does not explicitly disclose defining one or more event translators for execution by said PC. However Bear discloses a system wherein the invention of translating inputs is performed in the computer (Page 3, Paragraph 74 and Figure 15c; Page 10, Paragraph 130-131). Davenport has also disclosed that the peripheral action language (PAL) can be embodied outside of the input device (Figure 4b; Page 4,

Paragraph 58). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide the functionality of the computer executing the instructions in Davenport as taught by Bear. One would have been motivated to allow the computer to perform the execution because it improves the efficiency of the system being that the PC provides more powerful processors.

Claim 12: Davenport discloses a method of modifying input event behavior in a personal computer (PC), the method comprising:

associating each event translator with a selected type of incoming input event to said PC responsive to input by a user(Page 4, Paragraph 59 and 64);

defining a translation behavior of each event translator responsive to input by a user; including defining a translation function that modifies incoming input events to said PC according to one or more user configured functions(Page 4, Paragraph 59 and 64; Page 5, Paragraph 67); and

generating translated input events in said PC based on executing associated ones of the event translators responsive to detecting incoming input events to said PC of the selected types(Page 4, Paragraph 59 and 64).

However Davenport does not explicitly disclose defining one or more event translators for execution by said PC. However Bear discloses a system wherein the invention of translating inputs is performed in the computer (Page 3, Paragraph 74 and Figure 15c;

Page 10, Paragraph 130-131). Davenport has also disclosed that the peripheral action language (PAL) can be embodied outside of the input device (Figure 4b; Page 4, Paragraph 58). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide the functionality of the computer executing the instructions in Davenport as taught by Bear. One would have been motivated to allow the computer to perform the execution because it improves the efficiency of the system being that the PC provides more powerful processors.

Claim 13: Davenport and Bear disclose a method as claim 12, wherein generating translated input events in said PC based on executing associated ones of the event translators responsive to detecting incoming input events to said PC of the selected types comprises:

detecting operating system events to said PC(Bear: Inherently provides an OS within its computer system Page 3, Paragraph 74-75) that are associated with the selected types of incoming input events; and for each detected incoming input event of a selected type, translating that incoming input event according to the translation behavior defined for the associated event translator or translators(Davenport: Page 4, Paragraph 59 and 64; Page 5, Paragraph 67).

Claim 14: Davenport discloses a computer readable medium storing a computer program, comprising:

program instructions to enable a user to select a type of input event to said PC from a plurality of input event types;

program instructions to determine whether a given input event to said PC occurring during execution of the computer program by said PC matches the selected type of input event; and program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input event. (Page 4, Paragraph 59 and 64; Page 5, Paragraph 67).

However Davenport does not explicitly disclose that the computer is configured for execution by a personal computer (PC). However Bear discloses a system wherein the invention of translating inputs is performed by the computer (Page 3, Paragraph 74 and Figure 15c; Page 10, Paragraph 130-131). Davenport has also disclosed that the peripheral action language (PAL) can be embodied outside of the input device (Figure 4b; Page 4, Paragraph 58). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide the functionality of the computer executing the instructions in Davenport as taught by Bear. One would have been motivated to allow the computer to perform the execution because it improves the efficiency of the system being that the PC provides more powerful processors.

Claim 15: Davenport and Bear disclose a computer readable storing a program as in Claim 14 above but does not explicitly disclose a program that comprises a WINDOWSTM based program configured for execution on a WINDOWSTM based PC.

However Davenport and Bear do utilize a PC to interact with the invention and **official notice** is taken that windows and windows based programs are notoriously well known operating systems for PC's.

Claim 16: Davenport and Bear disclose a computer readable storing a program as in Claim 14 above and further discloses wherein the program instructions to enable a user to select a type of input event to said PC from a plurality of input event types comprise program instructions to enable selection from a plurality of event types include two or more of mouse events, keyboard events, MIDI events, Universal Serial Bus device events, RS-232 serial bus events, game port events, audio input events, analog input events, and infrared port events (Davenport: Page 4, Paragraph 58 and 64).

Claim 17 : Davenport and Bear disclose a computer readable storing a program as in Claim 14 above and further discloses wherein the program instructions program instructions to perform a desired input event translation by processing the given input according to **one or more** input event translation rules if the given input event matches the selected type of input event comprise program instructions to perform one or more of a plurality of translations comprising a re-mapping of the given input event type to one or more other input event types, a time-delay of the given input event, a parameter

modification of the given input event, a swallowing of the given input event to hide it from one or more other computer processes, and a swallowing of the given input event to hide it from additional event translation processing (Davenport: Page 5, Paragraph 66). By linking the two actions it swallows one of initial input actions.

Claim 18: Davenport and Bear disclose a computer readable storing a program as in Claim 14 above and further discloses wherein the program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input event comprise program instructions to re-map input events of the selected type into input events of at least one other type (Davenport: Page 4, Paragraph 59).

Claim 19: Davenport and Bear disclose a computer readable storing a program as in Claim 14 above and further discloses wherein said translation function that modifies incoming input events according to one or more user-configured functions comprises program instructions to modify one or more event parameters of input events of the selected type (Davenport: Page 4, Paragraph 59 and 64; Page 5, Paragraph 67).

Claim 20: Davenport and Bear disclose a computer readable storing a program as in Claim 14 above and further discloses wherein the program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input

event comprise program instructions to time-delay input events of the selected type according to a desired time delay value (Davenport: Page 5, Paragraph 66). Allows user to change time interval.

Claim 21: Davenport and Bear disclose a computer readable medium storing a computer program as in claim 1 above and further disclose wherein including program instructions to define a translation function that modifies incoming input events according to one more user-configured functions comprises including program instructions to modify one or more event parameters of the incoming input events (Davenport: Page 5, Paragraph 67). A single press is modified to multiple possible actions changing the parameters of that event.

Claim 22: Davenport and Bear disclose a computer readable medium storing a computer program as in claim 21 above and further discloses wherein the program instructions to modify one or more event parameters of the incoming input events comprise program instructions to apply a user configured mathematical function at least to selected types of incoming events (Davenport: Page 5, Paragraph 67). A single press action is modified to multiple possible press actions changing the parameters of that event, this is considered a mathematical function because it takes a single input and adds multiple input actions to that single input.

Claim 23: Davenport and Bear disclose a computer readable medium storing a computer program of claim 21, wherein the program instructions to modify one or more event parameters of the incoming input events comprise program instructions to apply a user configured mathematical scaling to one or more event parameters of a user selected type of incoming input event to thereby create corresponding translated input events of the same user selected type, but with one or more scaled event parameters. (Davenport: Page 5, Paragraph 67 and 71). Here mathematical calculation (scale) is proved to determine a type of input.

Claim 24: Davenport and Bear disclose a computer readable storage medium storing a computer program of claim 14, wherein the program instructions to perform a desired input event translation by processing the given input event giving input according to one or more input event translation rules if the given input matches the selected type of input event comprise program instructions to swallow the given input event to hide it from one or more other computer processes, or to swallow the given input event to hide it from additional event translation processing (Davenport: Page 5, Paragraph 67 and 71). Davenport discloses the ability of a check in paragraph 71, therefore a swallow functionality is provided. It also would have been obvious to swallow the input event any number of reasons that are needed for the program in use.

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport et al ("Davenport" US 2004/0263477 A1) and Bear et al ("Bear" 20040257341 A1) in further view King et al ("King" US 20030071842 A1).

Claim 9: Davenport and Bear disclose a computer readable medium storing a computer program as in claim 1 above, but does not explicitly disclose comprising program instructions to display a graphical user interface on a display screen of said PC, and wherein the graphical user interface is configured to enable a user to graphically define one or more event translators, and graphically link one or more selected incoming input events to one or more translated input events through the one or more graphically defined event translators. However King discloses dynamic and user defined events and further discloses graphically linking events (Figure 15). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention graphically link events in Davenport as taught by King. One would have been motivated to provide a graphical representation to improve operability of the system with visual feedback.

Claim 10: Davenport, Bear and King disclose a computer readable medium storing a computer program as in claim 9 above, and King also discloses enabling the user to drag-n-drop selected ones of those incoming input event types into an input event field, and into a translated input event field, and to make desired event translation connections between respective incoming input events in the input event field and

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respective translated input events in the translated input event field (Page 10, Paragraph 119).

Response to Argument

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. Additionally:

"In *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, [t]he two [pre-existing elements] in combination did no more than they would in separate, sequential operation." *Id.* at ___, 82 USPQ2d at 1395. This being said the functionality of applicants invention being incorporated within the pc does not make the invention novel. Secondly, Davenport discloses that translator and input devices can be embodied separately (Figure 4b) which provides obvious reasoning that the system could be found within the PC itself.

Per claim 6, Applicants argue the meaning of swallowing, examiner disagrees. The swallowing event can take on many forms, plus applicant has only proved exemplary definitions in the spec and the claims recite none of the detailed limitations argued or disclosed.

Per claim 8, Applicants argue that program does not trigger activation of targeted program. Examiner disagrees. Davenport shows matches of actions in paragraph 72, therefore the matches of the action within software can provide activations of targeted programs within the body of the software.

Per claim 15, Examiners official notice is taken to show how windows and windows based programs are well known in the art. Examiner also notes that the davenport may stress the portability but also discloses the ability to provide a system can be separate of the input device and therefore that system can be easily incorporated within in a pc as an add-on within that windows functionality.

Per claim 10, the drag and drop functionality for defining events is provided in King and therefore obviously can be incorporated and used through out the system for all possible events which could include inputs.

Conclusion

Applicants amendments necessitated the new ground(s) of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrod Keaton whose telephone number is 571) 270-1697. The examiner can normally be reached on Mon. thru Fri. and alternating Fri. off (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on 571-272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SLK
7-18-08

/William L. Bashore/
Primary Examiner, Art Unit 2175